

Annual Report of Accomplishments and Outcomes, July 2011 – June 2012
Minnesota Department of Health, Minnesota Occupational Health and Safety Surveillance Program
– Fundamental Program

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Publications/Presentations/News Releases

“Rates and Trends of Pneumoconioses and Mesothelioma in Minnesota,” Adrienne Kari, Allan Williams, Paula Lindgren, and Larry Olson. Poster presented at the National Occupational Research Agenda (NORA) Symposium, University of Minnesota, May 1, 2012, Minneapolis.

“Elevated Blood Lead Levels in Minnesota Adults: 2005 – 2011, Adrienne Kari, Allan Williams, and Paula Lindgren. Poster presented at the National Occupational Research Agenda (NORA) Symposium, University of Minnesota, May 1, 2012, Minneapolis.

NIOSH June 2010 eNews submission announcing the update and publication of the *Work Safe Work Smart* Curriculum on the Minnesota Department of Health website.

Breakout Presentation “A regional excess of mesothelioma attributable to two occupational cohorts in Minnesota.” Williams A, Brunner W, Bender A, Kari A. CSTE Annual Conference, June 3-7, 2012, Omaha.

Collaborations:

- We have worked to continue our collaborative relationships with the Minnesota Department of Labor and Industry (DLI), Minnesota OSHA, and the University of Minnesota (U of MN) Midwest Center for Occupational Health and Safety (MCOHS), as well as other MDH programs. DLI has provided us with data and expertise for the creation and interpretation of the occupational health indicators that rely on the use of workers’ compensation and BLS data. In return we have provided 6 of our Occupational Indicators to DLI for inclusion in their latest annual report *Minnesota Workplace Safety Report 2010*.
 - *Potential Outcome:* Inclusion of these indicators could potentially provide for improvement in workplace health and safety as health and safety professionals and employers are made aware of the rates and trends of occupational injury and disease in Minnesota.
- We were invited and have accepted a position on the advisory work group for a federal grant supporting a two-year project encouraging more employers to offer vaccines in the workplace. The Minnesota Department of Health Immunization program is directing the program and we have provided advice, recommendations, and data to aid in their activities. To date we have participated in four of their advisory workgroup meetings.
 - *Potential Outcome:* The data will provide context for the immunization program in understanding the diversity of Minnesota’s employee population and will allow for a more directed implementation of their plans for improved vaccination rates.
- We have also provided data and consultation to our Foodborne, Vector-borne, and Zoonotic Diseases Unit, that is currently conducting a surveillance project for zoonotic disease in agricultural workers in partnership with the University of Minnesota’s newly formed and NIOSH-supported Upper Midwest Agricultural Safety and Health Center.

- *Potential Outcome:* The data we have supplied will provide context as well as information to create rates and trends when completing their analysis.
- We were also successful in advocating for the inclusion of content and data on work-related illness and injury for an MDH statewide health assessment report, *The Health of Minnesota*.
 - *Potential Outcome:* This inclusion has the potential to draw attention to occupational health in Minnesota and provide opportunities to collaborate and integrate with other programs and units at the Minnesota Department of Health.
- The CDC-funded MDH Asthma Program has re-convened their advisory workgroup to address the issues of work-related asthma in Minnesota. As collaborators, we continue to participate in their advisory panel meetings. We developed a proposal with support of the Asthma program to conduct surveillance for work-related asthma in a Minnesota HMO population using an algorithm to search electronic health records.
- Met with the Occupational Medicine Group at a large local Health Care and Insurance provider to discuss opportunities for collaboration and renewed interest in future occupational medicine residents completing a rotation through the MDH Center for Occupational Health and Safety to gain experience in surveillance, epidemiology, and public health practice.
- The Minnesota Department of Labor and Industry (DLI) and the MDH Center for Occupational Health and Safety collaborated on a grant application to the US Bureau of Labor Statistics to conduct interviews of state SOII participants in specific high-risk industry groups to identify factors that may be associated with underreporting of occupational injuries and illnesses.
- Through a newly-established agreement between the Minnesota Poison Control Center and MDH, MedTox Fellows from Poison Control have an opportunity to include a rotation through the toxicology program at MDH. Occupational Health was included as part of that rotation, and the first Fellow (a physician) met with MDH Center staff in July.

Other Achievements

- As of March 2012, all 19 specified 2008 occupational health indicators had been completed and submitted to NIOSH for presentation on the CSTE website. The 2009 indicator data collection and calculations have been completed and we submitted all 19 OHIs to NIOSH in June of 2012.
- The scientific advisory group continued to meet and provide guidance and advice on grant related topics. One new member was added to the advisory group while one member left the advisory group. Meetings have been held to discuss the grant components, indicator data dissemination, the investigation of the feasibility of implementing MN statute 144.34, and a proposal to conduct a surveillance project to address work-related asthma.
- The development of an MDH Indicator-based web portal system by the CDC-funded MDH Environmental Public Health Tracking (EPHT) program has been completed. The EPHT program continues to support the inclusion of the CSTE/NIOSH occupational health indicators as they become available, beginning with the inclusion of a mesothelioma indicator to the portal.
 - *Potential Outcome:* The presentation of this data has the potential to draw attention to occupational health in Minnesota and provide opportunities to collaborate and integrate with users of the EPHT portal.

- We have completed trend analysis of the relevant CSTE/NIOSH occupational health indicators for years 2000 to 2009. A state profile to describe occupational health and safety in Minnesota has been drafted and is currently undergoing edits for publication and release.
 - *Potential Outcome:* This report will draw attention to issues relating to occupational health and safety, particularly for the creation of appropriate interventions or policy to further prevent occurrences of occupational disease and injury.
- We have updated and redesigned our website to include the indicators and accompanying information. Indicator data for all available years will be posted on the Center website with completed trend analysis and interpretation.
 - *Potential Outcome:* Presentation of this data has the potential to draw attention to occupational health in Minnesota and provide opportunities to collaborate and integrate with other researchers, regulators, and programs.
- The *Work Safe Work Smart* curriculum has been updated and published to the Center website. This curriculum was originally developed and evaluated with two previous NIOSH grants. The curriculum is targeted to rural high schools where youth may have both agricultural and non-agricultural work experiences. Updates include, but are not limited to, changes that have occurred to child labor laws and state-based educational mandates since the time the curriculum was evaluated in 2000-2004.
 - *Intermediate Outcome:* The curriculum was previously shown to be successfully implemented in a sample of rural Minnesota high schools and had a measurable impact on students' knowledge, beliefs, and attitudes toward occupational health and safety. The curriculum continues to be a popular download from the MDH web site.
- A comprehensive literature review and interviews with states that required physician reporting of occupational disease has been completed and a report has been drafted. Following final review and editing, the report will be disseminated to interested parties and made available through the Center website. Key respondents to the survey overwhelmingly cited the difficulties and substantial resources needed to ensure completeness of reporting. As resources are very limited, we developed a proposal for a pilot project to facilitate surveillance and reporting of work-related disease within a health care system. The proposal was developed in partnership with a Minnesota-based HMO/PPO and would utilize their electronic health records to identify cases of work-related asthma with the use of a computer algorithm. This algorithm would then be validated through review of the medical chart and an interview with the patient to confirm if they suffered from work-related asthma. The proposal remains on indefinite hold pending necessary preliminary investigations and identification of sufficient resources.
- Through the use of an online Google-News Search 12 agricultural fatalities were identified and media or news clippings relating to each incident were collected. We are continuing to collect these cases of agriculturally related fatalities and evaluate the use of Google-News as a source or means to conduct surveillance for agriculturally-related fatalities.
 - *Potential Outcome:* Represents an extremely cost-effective method for surveillance of ag-related fatalities in both workers and children.